AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claim 1 (Currently Amended): A method of testing a plurality of wireless subscriber stations, comprising:

generating a broadcast signal;

digitally creating in a digital processor a plurality of independently faded signals from the broadcast signal;

selectively creating, in the digital processor, a plurality of doppler frequency shifted signals from the plurality of independently faded signals to generate a plurality of independently faded, selectively doppler shifted signals; and

transmitting the plurality of digitally created, independently faded, selectively doppler shifted signals from a transmitter to each of the wireless subscriber stations under test.

Claim 2 (Currently Amended): The method of claim 1 further comprising monitoring each of the subscriber stations under test to determine whether it can recover the broadcast signal from the plurality of independently faded selectively doppler shifted signals.

Claim 3 (Original): The method of claim 1 further comprising receiving a signal from each of the wireless subscriber stations under test, digitally creating at least one independently faded signal from each of the received signals, and generating a second broadcast signal for the wireless subscriber stations under test based on said at least one independently faded signal created from each of the received signals.

Claim 4 (Currently Amended): The method of claim 1 further comprising converting each of the digitally created faded signals to an analog faded signal at a carrier frequency before transmitting

the plurality of independently faded selectively doppler shifted signals to their respective subscriber stations.

Claim 5 (Previously Presented): The method of claim 1 wherein the plurality of independently faded signals includes a first faded signal and a second faded signal, the first faded signal having a different fading model than the second faded signal.

Claim 6 (Previously Presented): The method of claim 1 wherein each of the plurality of independently faded signals is digitally created by generating multiple copies of the broadcast signal, independently scaling each of the multiple copies as a function of one or more parameters relating to a fading model, and combining the result.

Claim 7 (Original): The method of claim 6 further comprising applying a doppler frequency shift to each of the multiple copies.

Claim 8 (Original): The method of claim 6 further comprising applying a delay to each of the multiple copies.

Claim 9 (Original): The method of claim 1 wherein the broadcast signal comprises video.

Claim 10 (Original): The method of claim 1 wherein the broadcast signal comprises a spread-spectrum signal.

Claim 11 (Original): The method of claim 1 further comprising monitoring a digital communications signal from each of the subscriber stations under test.

Claim 12 (Original): The method of claim 11 wherein the digital communications signal from each of the subscriber stations under test is monitored by digitally creating two independently faded signals from each of the subscriber stations, combining a first one of the two independently faded signals from each of the subscriber stations under test, combining a second one of the two independently faded signals from each of the subscriber stations under test, and

attempting to recover the digital communications signal from each of the subscriber stations under test from the first and second ones of the combined independently faded signals.

Claim 13 (Currently Amended): An apparatus to test a plurality of wireless subscriber stations, comprising:

a base station simulator configured to generate a broadcast signal;

a digital processor configured to digitally create a plurality of independently faded and selectively doppler shifted signals from the broadcast signal; and

an interface configured to transmit the digitally created plurality of independently faded and selectively doppler shifted signals to each of the wireless subscriber stations under test.

Claim 14 (Original): The apparatus of claim 13 wherein the digital processor is further configured to receive a signal from each of the wireless subscriber stations under test, digitally create at least one independently faded signal from each of the received signals, and provide said at least one independently faded signal created from each of the received signals to the base station simulator.

Claim 15 (Original): The apparatus of claim 13 wherein the interface comprises a plurality of subscriber station test connections.

Claim 16 (Original): The apparatus of claim 13 wherein the interface is configured to convert each of the faded signals to an analog faded signal at a carrier frequency.

Claim 17 (Previously Presented): The apparatus of claim 13 wherein the plurality of independently faded signals includes a first faded signal and a second faded signal, the first faded signal having a different fading model than the second faded signal.

Claim 18 (Previously Presented): The apparatus of claim 13 wherein the digital processor further comprises a plurality of processing units each being configured to generate one of the plurality of independently faded signals.

Claim 19 (Original): The apparatus of claim 18 wherein each of the processing units comprises a plurality of processing elements each being configured to independently scale the broadcast signal as a function of one or more parameters relating to a fading model, and a combiner configured to combine the independently scaled broadcast signals.

Claim 20 (Original): The apparatus of claim 19 wherein each of the processing elements is further configured to apply a doppler frequency shift to the broadcast signal.

Claim 21 (Original): The apparatus of claim 19 wherein each of the processing elements is further configured to apply a delay to the broadcast signal.

Claim 22 (Original): The apparatus of claim 13 wherein the broadcast signal comprises video.

Claim 23 (Original): The apparatus of claim 13 wherein the broadcast signal comprises a spread-spectrum signal.

Claim 24 (Previously Presented): The apparatus of claim 13 wherein the interface is further configured to receive a communications signal from each of the subscriber stations under test, and wherein the digital processor is further configured to create two independently faded signals from each of the communications signals, combine a first one of the two independently faded signals created from each of the communications signals, combine a second one of the two independently faded signals created from each of the communications signals, and attempt to recover each of the communications signals from the first and second ones of the combined independently faded signals.

Claim 25 (Currently Amended): An apparatus to test a plurality of wireless subscriber stations, comprising:

means for generating a broadcast signal;

means for digitally creating a plurality of independently faded <u>selectively doppler shifted</u> signals from the broadcast signal; and

means for transmitting the plurality of digitally created, independently faded signals to each of the wireless subscriber stations under test.

Claim 26 (Currently Amended): The apparatus of claim 25 further comprising means for monitoring each of the subscriber stations under test to determine whether it can recover the broadcast signal from the plurality of independently faded selectively doppler shifted signals.

Claim 27 (Previously Presented): The apparatus of claim 25 further comprising means for receiving a signal from each of the wireless subscriber stations under test, digitally creating at least one independently faded signal from each of the received signals, and generating a second broadcast signal for the wireless subscriber stations under test based on said at least one independently faded signal created from each of the received signals.

Claim 28 (Previously Presented): The apparatus of claim 25 further comprising means for converting each of the digitally created faded signals to an analog faded signal at a carrier frequency before transmitting the plurality of independently faded signals to their respective subscriber stations.

Claim 29 (Previously Presented): The apparatus of claim 25 wherein the plurality of independently faded signals includes a first faded signal and a second faded signal, the first faded signal having a different fading model than the second faded signal.

Claim 30 (Previously Presented): The apparatus of claim 25 wherein each of the plurality of independently faded signals is digitally created by generating multiple copies of the broadcast signal, independently scaling each of the multiple copies as a function of one or more parameters relating to a fading model, and combining the result.

Claim 31 (Previously Presented): The apparatus of claim 30 further comprising means for applying a doppler frequency shift to each of the multiple copies.

Claim 32 (Previously Presented): The apparatus of claim 30 further comprising means for applying a delay to each of the multiple copies.

Claim 33 (Previously Presented): The apparatus of claim 25 wherein the broadcast signal comprises video.

Claim 34 (Previously Presented): The apparatus of claim 25 wherein the broadcast signal comprises a spread-spectrum signal.

Claim 35 (Previously Presented): The apparatus of claim 25 further comprising means for monitoring a digital communications signal from each of the subscriber stations under test.

Claim 36 (Previously Presented): The apparatus of claim 35 wherein the digital communications signal from each of the subscriber stations under test is monitored by digitally creating two independently faded signals from each of the subscriber stations, combining a first one of the two independently faded signals from each of the subscriber stations under test, combining a second one of the two independently faded signals from each of the subscriber stations under test, and attempting to recover the digital communications signal from each of the subscriber stations under test from the first and second ones of the combined independently faded signals.

Claim 37 (Currently Amended): A machine-readable medium comprising instructions to test a plurality of wireless subscriber stations, the instructions upon execution cause a machine to:

generate a broadcast signal;

digitally create a plurality of independently faded signals from the broadcast signal;

selectively create a plurality of doppler frequency shifted signals from the plurality of independently faded signals to generate a plurality of independently faded, selectively doppler shifted signals; and

transmit the plurality of digitally created, independently faded signals to each of the wireless subscriber stations under test.

Claim 38 (Currently Amended): The machine-readable medium of claim 37 further comprising instructions to monitor each of the subscriber stations under test to determine whether it can recover the broadcast signal from the plurality of independently faded selectively doppler shifted signals.

Claim 39 (Previously Presented): The machine-readable medium of claim 37 further comprising instructions to receive a signal from each of the wireless subscriber stations under test, digitally create at least one independently faded signal from each of the received signals, and generate a second broadcast signal for the wireless subscriber stations under test based on the at least one independently faded signal created from each of the received signals.

Claim 40 (Previously Presented): The machine-readable medium of claim 37 further comprising instructions to convert each of the digitally created faded signals to an analog faded signal at a carrier frequency before transmitting the plurality of independently faded signals to their respective subscriber stations.

Claim 41 (Previously Presented): The machine-readable medium of claim 37 wherein the plurality of independently faded signals includes a first faded signal and a second faded signal, the first faded signal having a different fading model than the second faded signal.

Claim 42 (Previously Presented): The machine-readable medium of claim 37 wherein each of the plurality of independently faded signals is digitally created by generating multiple copies of the broadcast signal, independently scaling each of the multiple copies as a function of one or more parameters relating to a fading model, and combining the result.

Claim 43 (Previously Presented): The machine-readable medium of claim 42 further comprising instructions to apply a doppler frequency shift to each of the multiple copies.

Claim 44 (Previously Presented): The machine-readable medium of claim 42 further comprising instructions to apply a delay to each of the multiple copies.

Claim 45 (Previously Presented): The machine-readable medium of claim 37 wherein the broadcast signal comprises video.

Claim 46 (Previously Presented): The machine-readable medium of claim 37 wherein the broadcast signal comprises a spread-spectrum signal.

Claim 47 (Previously Presented): The machine-readable medium of claim 37 further comprising instructions to monitor a digital communications signal from each of the subscriber stations under test.

Claim 48 (Previously Presented): The machine-readable medium of claim 47 wherein the digital communications signal from each of the subscriber stations under test is monitored by digitally creating two independently faded signals from each of the subscriber stations, combining a first one of the two independently faded signals from each of the subscriber stations under test, combining a second one of the two independently faded signals from each of the subscriber stations under test, and attempting to recover the digital communications signal from each of the subscriber stations under test from the first and second ones of the combined independently faded signals.

Claim 49 (Currently Amended): A method for testing wireless subscriber stations, the method comprising:

generating a broadcast signal in a base station simulator separate from the wireless subscriber stations;

digitally creating in a digital processor separate from the wireless subscriber stations a plurality of independently faded and selectively doppler shifted signals from the broadcast signal; and

transmitting the digitally created, independently faded and selectively doppler shifted signals from one or more transmitters associated with the digital processor to one or more of the wireless subscriber stations.

Claim 50 (Currently Amended): A system comprising:

a plurality of wireless subscriber stations; and

an apparatus, separate from the wireless subscriber stations, to test the plurality of wireless subscriber stations, the apparatus comprising:

a base station simulator configured to generate a broadcast signal,

a digital processor configured to digitally create a plurality of independently faded and selectively doppler shifted signals from the broadcast signal, and

an interface configured to transmit the digitally created, plurality of independently faded and selectively doppler shifted signals to one or more of the wireless subscriber stations.

Claim 51 (New): The method of claim 1, wherein transmitting the plurality of digitally created, independently faded, selectively doppler shifted signals comprises:

transmitting a first of the plurality of digitally created, independently faded, selectively doppler shifted signals to a first antenna port of a first wireless subscriber station under test; and

transmitting a second of the plurality of digitally created, independently faded, selectively doppler shifted signals to a second antenna port of a first wireless subscriber station under test, wherein the second antenna port is spatially diverse from the first antenna port.